

DESCRIPTIVE MODEL OF ALMADEN Hg

By James J. Rytuba

APPROXIMATE SYNONYM Almaden type.

DESCRIPTION Stratabound disseminated cinnabar and native mercury in volcaniclastic sedimentary rocks.

GENERAL REFERENCE Saupe (1973).

GEOLOGICAL ENVIRONMENT

Rock Types Unmetamorphosed shale, graywacke, calcareous graywacke, andesitic lava and tuff, andesite dikes. Volcanic vent breccia.

Age Range Almaden is Silurian, but deposits may be any age.

Depositional Environment Permeable sedimentary rocks, andesite dikes possibly near volcanic center.

Tectonic Setting(s) Volcanic centers along major deep-seated fault zone. Absence of regional metamorphism or plutonism following mineralization.

Associated Deposit Types Stibnite veins.

DEPOSIT DESCRIPTION

Mineralogy Cinnabar ± native mercury + pyrite + calcite + quartz.

Texture/Structure Disseminated.

Ore Controls Mineralized zone follows major fault, highest grade ore in calcareous graywacke.

Geochemical Signature Hg, As, Sb.

EXAMPLES

Almaden, SPAN	(Saupe, 1973)
Santa Barbara, PERU	(Berry and Singewald, 1922)
Nueva Esperanza, CLBA	(Lozano and others, 1977)